

UniVerse Skillet™ GAS FIRED FRYING & BRAISING PAN

TECHNICAL MANUAL



MODELS:

30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX,
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX

COVERING:

- Installation
- Operation
- Service and Parts

WARNING:

Improper Installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

In a prominent location, post instructions to be followed in the event the user smells gas. This information shall be obtained by consulting the local gas supplier.

FOR YOUR SAFETY:

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.



35 Gravey Street | Everett | MA | 02149
Tel: (617) 387-4100 | Fax: (617) 387-4456 | Outside Fax: 1-800-227-2659
Customer E-Mail: custserv@mfii.com | Website: www.mfii.com

Form Number: S-2469 Rev. B 07/04 Printed in the U.S.A.

TABLE OF CONTENTS

SECTION 1 GENERAL INFORMATION

UniVerse Skillet Spec Sheet	1-1
-----------------------------------	-----

SECTION 2 INSTALLATION INSTRUCTIONS

Installation of UniVerse Tilting Skillet (with Pilot)	2-1
General Installation	2-1
Installation with Casters	2-1
Lighting Instructions for Tilting Skillet Pilot and Burners	2-1
Shutdown Instructions	2-1
Installation of UniVerse Tilting Skillet (with Pilotless Ignition)	2-2
General Installation	2-2
Installation with Casters	2-3
Lighting Instructions for Tilting Skillet Glow Coil	2-3
Shutdown Instructions	2-3
Prolonged Shutdown	2-3

SECTION 3 OPERATING INSTRUCTIONS

Introduction	3-1
Operation of UniVerse Tilting Skillet (with Pilot)	3-1
Operation of UniVerse Tilting Skillet (with Pilotless Ignition)	3-2

SECTION 4 TEST KITCHEN BULLETIN

Cooking Facts on Parade	4-1
Table 4.1 Cooking Portions and Times	4-2

SECTION 5 ILLUSTRATED PARTS LISTS

Table 5.1 UniVerse Skillet, Top Assembly Parts List	5-1
Table 5.2 UniVerse Skillet, Pan Assembly Parts List	5-3
Table 5.3 UniVerse Skillet, Standing Pilot Nema Box Assembly Parts List	5-5
Table 5.4 UniVerse Skillet, Carborundum Nema Box Assembly Parts List	5-8

SECTION 6 TROUBLE-SHOOTING AND MAINTENANCE

Table 6.1 Troubleshooting Guide	6-1
Calibration of Temperature Control	6-1
Replacement of Temperature Control	6-2
Adjustment of Interlock Switch	6-2
Cleaning and Preventive Maintenance	6-2

LIST OF ILLUSTRATIONS

SECTION 2 INSTALLATION INSTRUCTIONS

Figure 2.1	Wiring Diagram, Manual Tilt Standing Pilot Units	2-4
Figure 2.2	Wiring Diagram, Power Lift Standing Pilot Units	2-5
Figure 2.3	Wiring Diagram, Carborundum Units	2-6

SECTION 5 ILLUSTRATED PARTS LISTS

Figure 5.1	UniVerse Skillet, Top Assembly	5-2
Figure 5.2	UniVerse Skillet, Pan Assembly	5-4
Figure 5.3	UniVerse Skillet, Standing Pilot Nema Box Assembly	5-5
Figure 5.4	UniVerse Skillet, Carborundum Nema Box Assembly	5-6

SECTION 6 TROUBLE-SHOOTING AND MAINTENANCE

Figure 6.1	Temperature Control Circuit Board	6-1
------------	---	-----

SUMMARY OF SAFETY NOTICES

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet 30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

The following general safety notices supplement the specific warnings and cautions contained in this technical manual. They are recommended precautions that must be understood and adhered to during the installation, operation, and maintenance of these electrically operated appliances.

WARNING:

Do not get water on wiring in controls. Be sure to wash inside of skillet pan, inside of cover including under drip-lip, and pouring spout area.

CAUTION: Do not install in such a manner that the service person cannot remove the control box cover.

Supply wires must be suitable for temperature of at least 90°C. Additionally, all wiring must conform to the requirements of local and national electric codes. Conduit and fittings should be watertight type.

Unit is equipped with an interlock switch that shuts off gas to the burners when skillet pan is more than 10° above normal horizontal cooking position.

SECTION 1 GENERAL INFORMATION

G

UniVerse GAS TILTING SKILLET

JOB NAME: _____
ITEM NO.: _____
NO. REQUIRED: _____

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

- MODELS:**
- m 40-STGM
 - m 30-STGM
 - m 40-STGL
 - m 30-STGL

DESCRIPTION:

The Market Forge Gas UniVerse Tilting Skillets™ are available in 30-gallon (87-liter) and 40-gallon (114-liter) pan bodies with 108,750 BTU and 145,000 BTU inputs, respectively. Both models are available in open-leg and closed-base frame assemblies with manual or power tilt capabilities.

Benefits: Our UniVerse Skillets, unlike those of other braising pan manufacturers that use clad plates, incorporate a uni-pan design. This design reduces the potential for leaks and eliminates the possibility of pitting and surface rusting. The new center-of-gravity tilting allows for safe use of caster mounting. Our new power tilt operates smoothly, with manual override that works easily when needed, without the use of electric drills required by other manufacturers.

Construction: The UniVerse Skillet has a textured stainless steel cooking surface with reinforcement. Heating elements turn off automatically when the cooking pan is raised to a tilted position. The skillet is provided with a heavy-duty gas shock assisted cover with condensate vent.

The cooking pan and cover are mounted to a 11/2" (38 mm) square stainless steel tube frame, permitting access to floor for easy cleaning. The closed-base model incorporates easily removable stainless steel panels on the front and left sides. The cooking pan tilts to a full 93°. This is accomplished by a gear mechanism operated manually with a collapsible hand crank. Power tilting is also available. Both tilting methods allow complete emptying of contents under positive control.

TECHNICAL SPECIFICATIONS:

Cooking Pan: The unitized cooking pan has no bottom welds and is reinforced to resist cracking as expansion and contraction occur. The textured cooking surface is machine-applied for a long-wearing, good appearance. The cooking pan incorporates an easy-pour lip and 5-gallon increment markings. Gas flames are applied to finned aluminum extrusions bolted to the underside of the cooking pan for better heat transfer. An interlock switch is provided



30 - STGM Shown

Controls: The UniVerse Tilting Skillet™ comes standard with a solid-state temperature controller with a positive off position and 100°–450° Fahrenheit scale, a pilot light to indicate when the gas burners are on, and a 1-hour mechanical timer. Optional power tilting mechanism also utilizes an up/down rocker switch. Manual tilting mechanism uses a collapsible hand crank located below the control panel. A high-limit temperature control is also provided. The control housing shall be water resistant/splash-proof.

Operation: The UniVerse Tilting Skillet™ Models 40-STGM and 40-STGL will be rated at 145,000 BTU at 4" W.C. natural gas and 10" W.C. propane gas. Models 30-STGM and 30-STGL will be rated at 108,750 BTU at 4" W.C. natural gas and 10" W.C. propane gas.

OPTIONS: (Optional at Extra Cost:)

- m Power tilt mechanism
- m Pan support
- m Removable liquid strainer
- m 12" x 20" (305 mm x 508 mm) pan holder inserts
(pan not included)
- m 1 1/2" Tangent draw-off valve
- m Single & Double Faucet
- m Single & Double pantry hose
- m Caster kit
- m Strainer relief kit
- m 480 Volt

The manufacturer reserves the right to modify materials and specifications without notice

Spec No. S-2446D
01/03

FOOD SERVICE EQUIPMENT
UniVerse Skillet

AutoQuotes

Printed in U.S.A.



MARKET **F**ORGE
I N D U S T R I E S I N C.
An Employee Owned Company

SECTION 1 GENERAL INFORMATION

G

UniVerse GAS TILTING SKILLET

DETAILS & DIMENSION

MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet

EC = Electrical control circuit connection

G = Gas

HW = Hot water

CW = Cold water

DIMENSIONS AND CAPACITY:

Skillet Pan Internal Dimensions:

- Models 40-STGM and 40-STGL:

42.25" (1073 mm) Wide x 9" (228 mm) Deep x 25.75"
(654 mm) Front-to- Back.

- Models 30-STGM and 30" STGL:

30.25" (768 mm) Wide x 9" (228 mm) Deep x 25.75"
(654 mm) Front-to-Back.

Skillet Pan Capacity:

- Models 40-STGM and 40-STGL:

40 gallons (152 liters)

- Models 30-STGM and 30-STGL:

30 gallons (114 liters)

ELECTRICAL & GAS CHARACTERISTICS:

Control Circuit: 120V AC, 60 Hz, 1-phase, 1/2" (13 mm) conduit, 6 amps max. If the equipment is to be installed where the elevation exceeds 2,000 feet (609.9 meters) above sea level, specify installation altitude so that proper

gas orifices can be provided. Allow 2" at rear and 0" at sides if adjacent walls are combustible. May be installed on combustible floor.

Gas connection: 3/4- (19 mm) NPT

Manifold Gas Pressure and Inputs:

40-STGM	30-STGM
---------	---------

40-STGL	30-STGL
---------	---------

W.C.	BTU	BTU
------	-----	-----

• Natural standing pilot	4"	145,000	108,750
--------------------------	----	---------	---------

• Propane standing pilot	10"	145,000	108,750
--------------------------	-----	---------	---------

• Natural pilotless ignition	4"	145,000	108,750
------------------------------	----	---------	---------

• Propane pilotless ignition	10"	145,000	108,750
------------------------------	-----	---------	---------

Incoming gas pressure must not exceed 14" (357 mm) W.C.

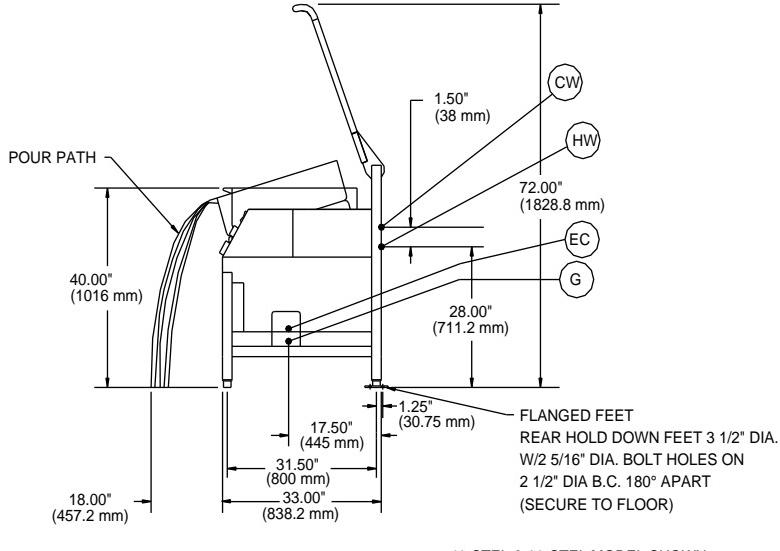
WATER CONNECTIONS:

Cold Water: 3/8" NPT to cold water faucet

Hot Water: 3/8" NPT to hot water faucet

Water Pressure Requirements: 50 PSI (3.5 kg/cm²) max.; 25 PSI (1.8 kg/cm²) min.

Water connections are optional when required.



40-STEL & 30-STEL MODEL SHOWN

*It is our policy to build equipment which is design certified by U.L., A.S.M.E., N.S.F. and C.S.A. However, a continuing program of product improvement makes it necessary to submit new models to the agencies as they are developed and consequently not all models bear the appropriate agency labels at all times.



SECTION 2 INSTALLATION INSTRUCTIONS

**MODELS: 30-STGL, 30-STGM, 40-STGL, 40-STGM, Gas Standing Pilot
30-STGM-LX, 30-STGL-LX, 40-STGM-LX, 40-STGL-LX, Gas Standing Pilot with Power Tilt**

GENERAL INSTALLATION

1. Remove carton from skid, being careful not to dent or scratch finished surfaces of unit.
2. Inspect unit carefully for shipping damage. File claim with carrier immediately if damage is found.
3. Remove screws holding unit to skid.
4. Transfer unit to desired position and make level and steady by adjusting feet to compensate for floor irregularities. Bolt the flange feet to floor.
5. Raise skillet cover to full open position. Raise skillet by turning handcrank clockwise. Check to make sure burners and carry-over tube are in position and securely seated.
6. Lower skillet by turning handcrank counterclockwise until fully seated on frame. Skillet is equipped with interlock switch, which does not permit burners to ignite until skillet is lowered to less than 10° off normal horizontal cooking position.

Note: "LX" models may be raised or lowered using tilt switch after connecting to electrical supply.

7. Gas service connections:

- a. This unit is factory-adjusted for gas consumption of 180,750 BTU/Hr. (on 30-gallon unit) or 145,000 BTU/ Hr. (on 40-gallon unit) at the pressure indicated. Please read the rating plate on top of control box. If this plate is marked for a different gas than that supplied, notify your dealer immediately.

DO NOT CONNECT GAS LINES. Only a qualified installer or service man should make the installation.

- b. Use new 3/4 I.P.S. iron or steel pipe complying with ANSI Standard for Wrought-Steel and Wrought-Iron

Pipe B36—latest edition, properly threaded, reamed, and free from chips, oil, and dirt.

If pipe dope is used, apply a moderate amount, leaving two end threads bare. Connect the gas line into bottom (inlet) side of shutoff valve with a union and make accessible to the operator.

- c. Natural gas units are equipped with a pressure regulator factory-adjusted to give 4" (102 mm) water column manifold pressure. The supply pressure must be at least 5" (127 mm) water column pressure.
- d. Propane gas units are equipped with a pressure regulator factory-adjusted to give 10" (254 mm) water column manifold pressure. The supply pressure must be at least 11" (279 mm) water column pressure.
- e. Maximum supply pressure must not exceed 1/2 psig (3.45 k/PA) for both natural and propane gas.
- f. Perform a gas leak test of all newly-made joints, as well as those leading to the main gas control valve and pilot burner, using a soap solution. Do not use flame.

8. Electrical service connection:

Connect skillet controls to 110/120 volt AC, 60 Hz, single-phase branch circuit rated 15 amps capacity. Wiring will conform to the requirements of national and local electrical codes (220 volts, 50 Hz, single-phase for export units). Only a licensed electrician should make electrical connection.

INSTALLATION WITH CASTERS

1. Installation shall be made with a connector that complies with the Standard for Connectors for Moveable Gas Appliances, CAN/CGA-6.16, and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.41 or the Standard for Quick-Disconnect Devices for Use with Gas Fuel, CAN-6.9
2. Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement.
3. The location(s) where the restraining means may be attached to the appliance shall be specified.

LIGHTING INSTRUCTIONS FOR TILTING SKILLER PILOT AND BURNERS

1. Turn the thermostat to off position.
2. Raise the skillet all the way up for access to pilot and gas control.
3. Depress and turn control gas cock dial to off position.
4. Wait 5 minutes to allow gas that may have accumulated in the main burner compartment to escape.

LIGHT PILOT AS FOLLOWS:

1. Turn gas cock dial to pilot position.
2. Depress gas cock dial and light pilot; with pilot burning, hold gas cock dial depressed for approximately a half minute before releasing.

Note: If pilot does not remain lighted, repeat Step 2, allowing a longer period of time before releasing gas cock dial. (Adjust pilot flame if necessary.)

SHUTDOWN INSTRUCTIONS

1. Turn the thermostat to off position.
2. Raise skillet all the way up for access to gas control.
3. Depress and turn control gas cock dial to off position.
4. Lower skillet to normal horizontal cooking position.

SECTION 2 INSTALLATION INSTRUCTIONS

CAUTION: BE SURE TO READ

- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- Allow adequate ventilation to unit. Install under exhaust hood.
- Keep this manual for future reference.
- This installation must conform with local codes or, in the absence of local codes, with National Fuel Gas code, ANSI Z223.1—latest edition; or the Natural Gas Installation Code, CAN/CGA—B149.1; or the Propane Installation Code, CAN/CGA—B149.2, as applicable.
- The griddle and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psig (3.45 k/PA).
- The griddle must be isolated from the gas supply system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2" psig (3.45 k/PA).
- This unit is serviceable from the front. Do not install in such a manner that a service person cannot remove front panels if provided.

- When installed, this appliance must be electrically grounded in accordance with local codes, or, in the absence of local codes, with the National Electric Code, ANSI/NFPA No. 70—latest edition.
- In Canada, this installation must conform to C.S.A. Standard C22.1 Canadian Electrical Code, Part 1.
- The wiring diagram adhesive label is located on the inside of the control box cover.
- The product must be installed in a room with adequate air supply for complete gas combustion.
- Do not place on or directly against the unit any objects that would block air openings into the combustion chamber.
- Suitable for use on combustible floors.
- Clearances from both combustible and noncombustible construction are 0" (0 mm) from side walls, 2" (51 mm) from rear wall.
- This unit does not have a flexible cord wired into electrical system.

**MODELS: 30-STGL-4, 30-STGM-4, 40-STGL-4, 40-STGM-4, Gas Pilotless Ignition
30-STGM-4LX, 30-STGL-4LX, 40-STGM-4LX, 40-STGL-4LX, Gas Pilotless Ignition with Power Tilt**

UNIVERSE TILTING SKILLET WITH PILOTLESS IGNITION

GENERAL INSTALLATION

1. Remove carton from skid, being careful not to dent or scratch finished surfaces of unit.
2. Inspect unit carefully for shipping damage. File claim with carrier immediately if damage is found.
3. Remove screws holding unit to skid.
4. Transfer unit to desired position and make level and steady by adjusting feet to compensate for floor irregularities. Bolt the flange feet to floor.
5. Raise skillet cover to full open position. Raise skillet by turning handcrank clockwise. Check to make sure burners and carry-over tube are in position and securely seated.
6. Lower skillet by turning handcrank counterclockwise until fully seated on frame. Skillet is equipped with interlock switch, which does not permit burners to ignite until skillet is lowered to less than 10° off normal horizontal cooking position.

Note: "LX" models may be raised or lowered using tilt switch after connecting to electrical supply.

7. Gas service connections:

- a. This unit is factory-adjusted for gas consumption of 180,750 BTU/Hr. (on 30-gallon unit) or 145,000 BTU/ Hr. (on 40-

gallon unit) at the pressure indicated. Please read the rating plate on top of control box. If this plate is marked for a different gas than that supplied, notify your dealer immediately.

DO NOT CONNECT GAS LINES. Only a qualified installer or service man should make the installation.

- b. Use new 3/4 I.P.S. iron or steel pipe complying with ANSI Standard for Wrought-Steel and Wrought-Iron Pipe B36—latest edition, properly threaded, reamed, and free from chips, oil, and dirt.
If pipe dope is used, apply a moderate amount, leaving two end threads bare. Connect the gas line into bottom (inlet) side of shutoff valve with a union and make accessible to the operator.
- c. Natural gas units are equipped with a pressure regulator factory-adjusted to give 4" (102 mm) water column manifold pressure. The supply pressure must be at least 5" (127 mm) water column pressure.
- d. Propane gas units are equipped with a pressure regulator factory-adjusted to give 10" (254 mm) water column manifold pressure. The supply pressure must be at least 11" (279 mm) water column pressure.
- e. Maximum supply pressure must not exceed 1/2 psig (3.45 k/PA) for both natural and propane gas.
- f. Perform a gas leak test of all newly-made joints, as well as those leading to the main gas control valve and pilot burner, using a soap solution. Do not use flame.

SECTION 2 INSTALLATION INSTRUCTIONS

8. Electrical service connection:

Connect skillet controls to 110/120 volt AC, 60 Hz, single-phase branch circuit rated 15 amps capacity. Wiring will conform to the requirements of national and local electrical codes (220 volts, 50 Hz, single-phase for export units). Only a licensed electrician should make electrical connection.

INSTALLATION WITH CASTERS

1. Installation shall be made with a connector that complies with the Standard for Connectors for Moveable Gas Appliances, CAN/CGA-6.16, and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.41 or the Standard for Quick-Disconnect Devices for Use with Gas Fuel, CAN-6.9.
2. Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement.
3. The location(s) where the restraining means may be attached to the appliance shall be specified.

LIGHTING INSTRUCTIONS FOR TILTING SKILLERS GLOW COIL

1. Turn the thermostat counterclockwise to off position.
2. Wait 5 minutes to allow gas that may have accumulated in the main burner compartment to escape.
3. Turn thermostat to desired temperature position.

Note: Gas will ignite approximately 40 seconds after thermostat is set at desired temperature.

SHUTDOWN INSTRUCTIONS

Turn the thermostat counterclockwise to off position.

PROLONGED SHUTDOWN

Prolonged Shutdown

1. Turn the thermostat counterclockwise to off position.
2. Turn gas valve located on bottom right rear to off position.

CAUTION: BE SURE TO READ

- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- Allow adequate ventilation to unit. Install under exhaust hood.
- Keep this manual for future reference.
- This installation must conform with local codes or, in the absence of local codes, with National Fuel Gas code, ANSI Z223.1—latest edition; or the Natural Gas Installation Code, CAN/CGA—B149.1; or the Propane Installation Code, CAN/CGA—B149.2, as applicable.
- The griddle and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2" psig (3.45 k/PA).
- The griddle must be isolated from the gas supply system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2" psig (3.45 k/PA).
- When installed, this appliance must be electrically grounded in accordance with local codes, or, in the absence of local codes, with the National Electric Code, ANSI/NFPA No. 70—latest edition.
- In Canada, this installation must conform to C.S.A. Standard C22.1 Canadian Electrical Code, Part 1.
- The wiring diagram adhesive label is located on the inside of the control box cover.
- The product must be installed in a room with adequate air supply.
- Do not place on or directly against the unit any objects that would block air openings into the combustion chamber.
- Suitable for use on combustible floors.
- Clearances from both combustible and noncombustible construction are 0" (0 mm) from side walls, 2" (51 mm) from rear wall.
- This unit is serviceable from the front. Do not install in such a manner that a service person cannot remove front panels if provided.
- This unit does not have a flexible cord wired into electrical system.

SECTION 2 INSTALLATION INSTRUCTIONS

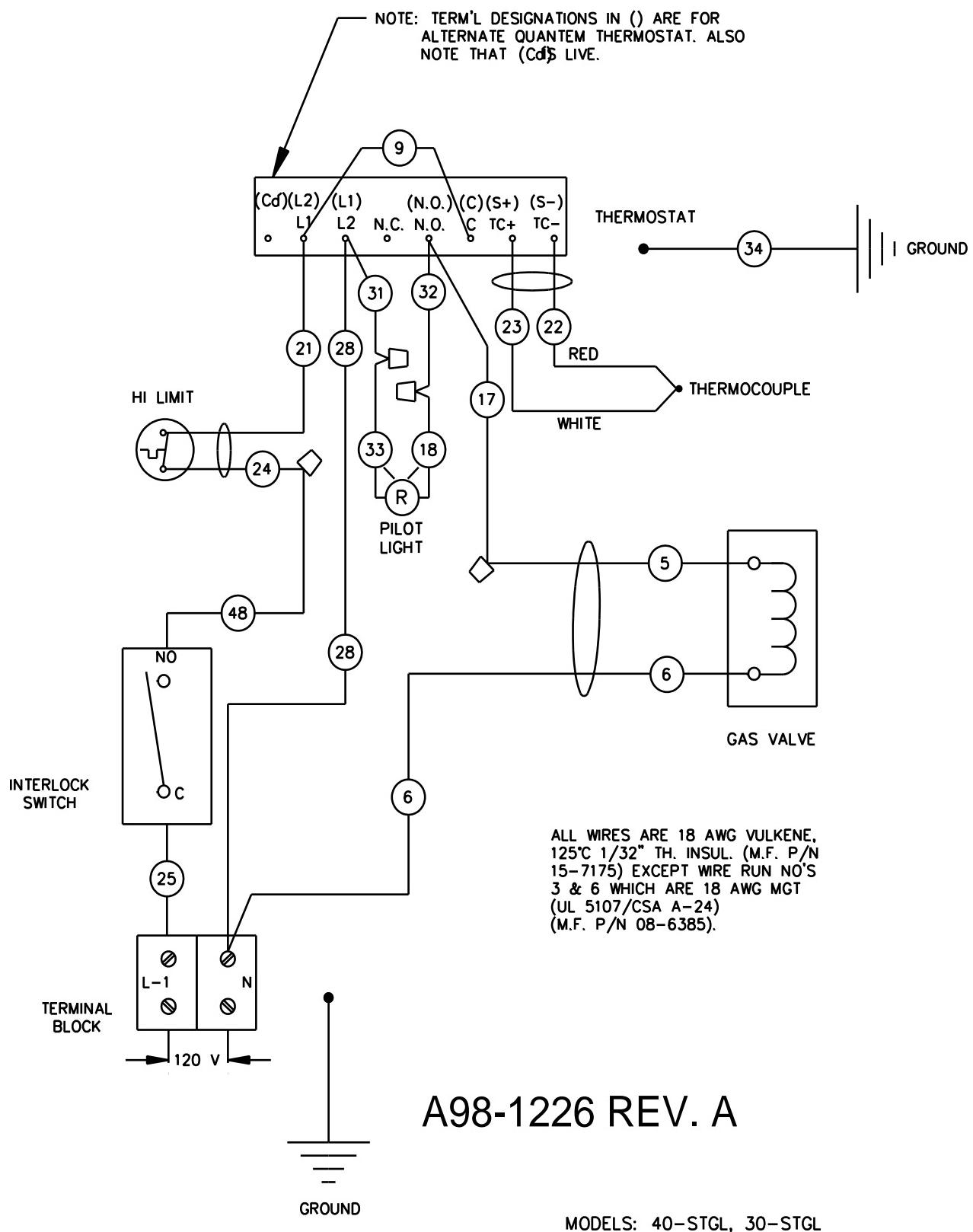


Figure 2-1 Wiring Diagram, Manual Tilt Standing Pilot Units

SECTION 2 INSTALLATION INSTRUCTIONS

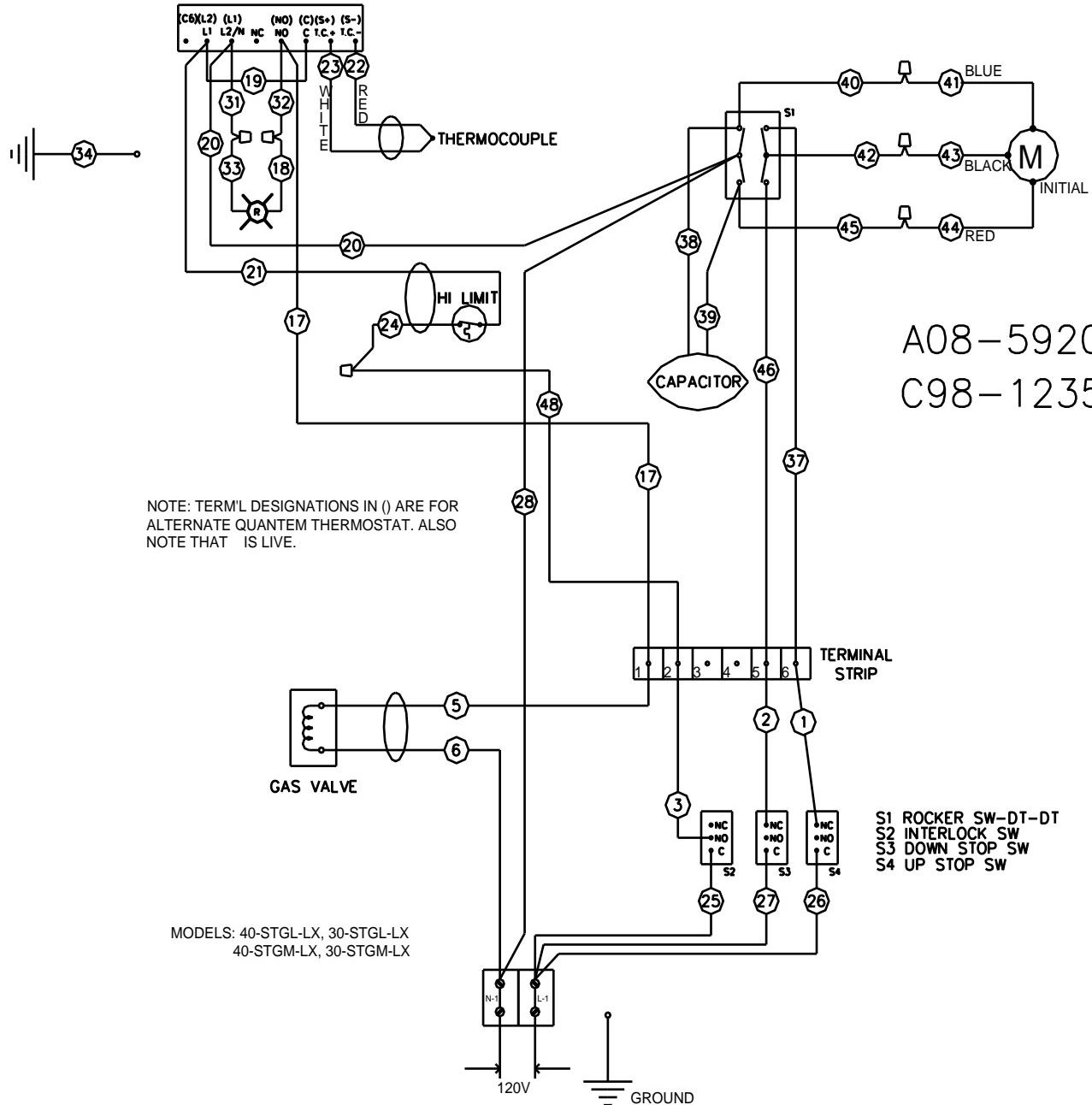


Figure 2-2 Wiring Diagram, Power Lift Standing Pilot Units

SECTION 2 INSTALLATION INSTRUCTIONS

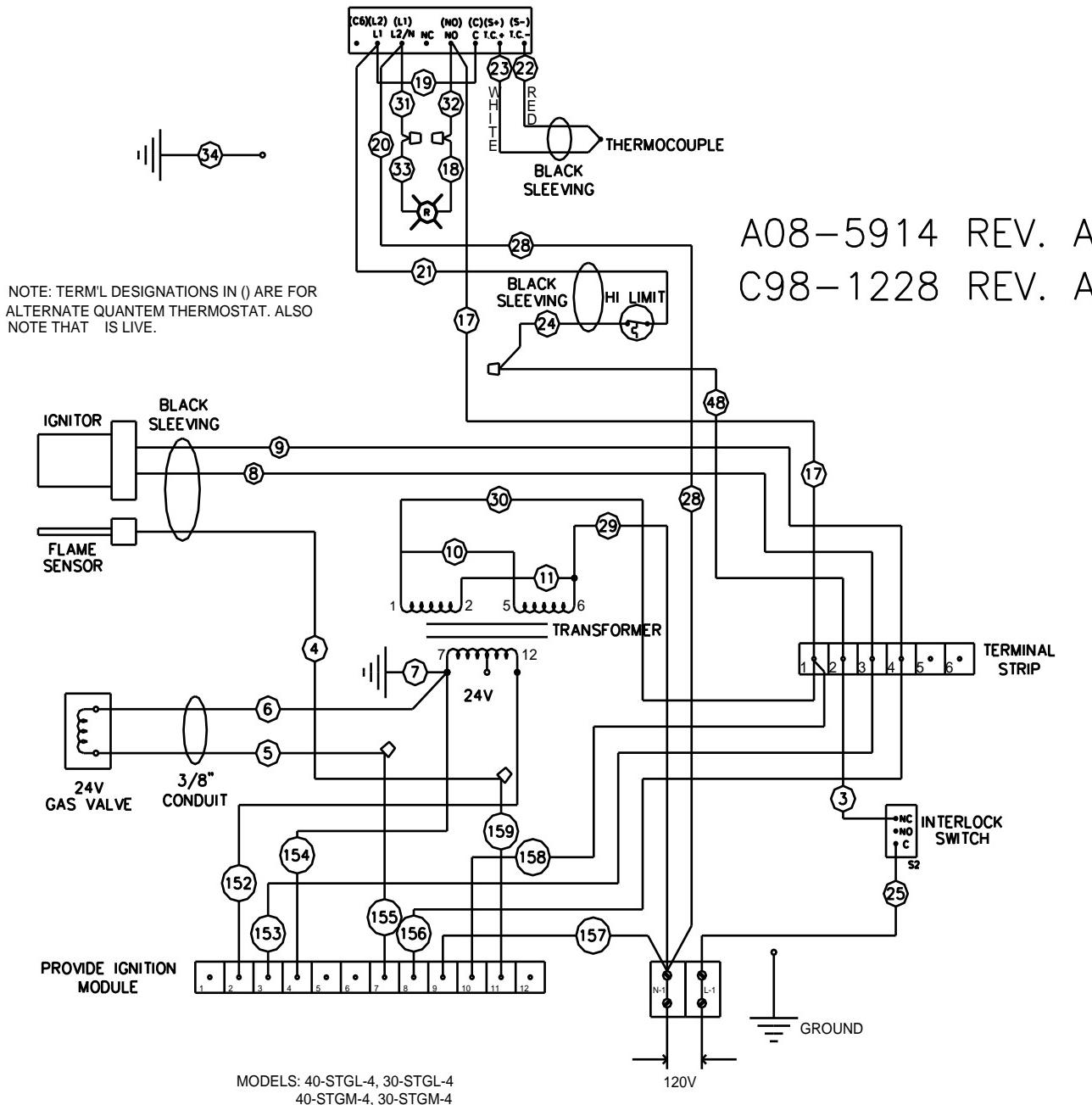


Figure 2-3 Wiring Diagram, Manual Tilt Carborundum Units

SECTION 2 INSTALLATION INSTRUCTIONS

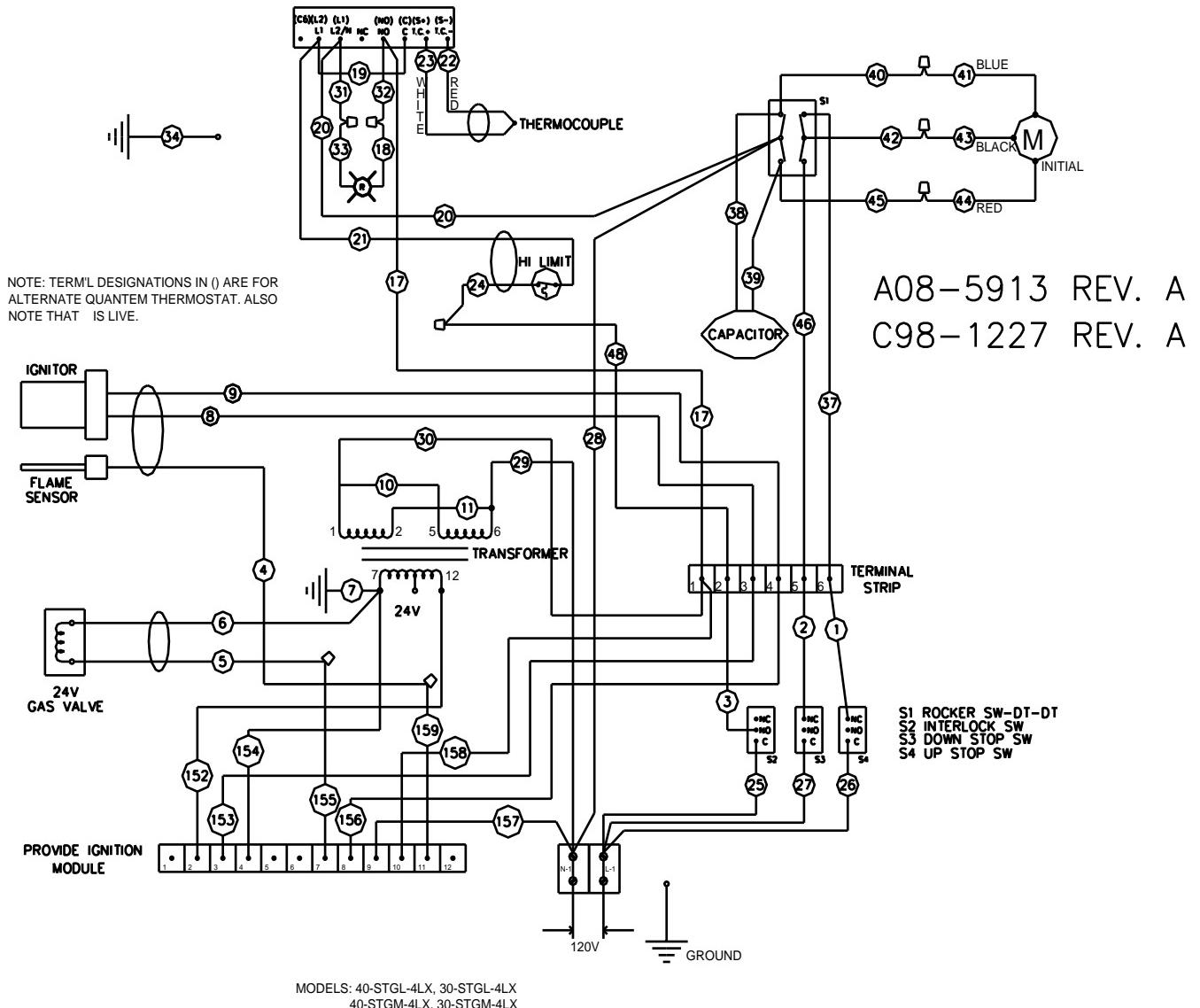


Figure 2-4 Wiring Diagram, Power Tilt Carborundum Units

SECTION 3 OPERATING INSTRUCTIONS

UNIVERSE TILTING SKILLET

**MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet**

INTRODUCTION

This technical manual contains general information, installation, operation, principles of operation, troubleshooting guide, and maintenance information for the UniVerse Tilting Skillet. Also included is an illustrated parts list and a directory of authorized parts and service agencies.

DESCRIPTION

The Market Forge Industries UniVerse Models 30-STGL (108,750 Btu input) and 40-STGL (145,00 Btu input) are elec-

trically operated skillets, tilting type, with 30- and 40-gallon capacities, respectively. They are equipped with a solid state thermostat and high-limit control with a 100°F-to-450°F temperature scale.

BASIC FUNCTIONS

The UniVerse Tilting Skillet is a very versatile cooking appliance. It can perform basic cooking functions, such as braising meat, sautéing, pan-frying chicken, steaming vegetables, boiling, and simmering. Refer to Section 4—Test Kitchen Bulletin, which gives detailed information on the various types of food products that can be cooked in the skillet.

OPERATION OF UNIVERSE TILTING SKILLET WITH PILOT

**MODELS: 30-STGL, 30-STGM, 40-STGL, 40-STGM, Gas Standing Pilot
30-STGM-LX, 30-STGL-LX, 40-STGM-LX, 40-STGL-LX, Gas Standing Pilot with Power Tilt**

1. Check to see that the correct gas connection has been made to the unit, the electric 110/120-volt connection has been made, and the pilot has been lighted. (Instructions for lighting pilot are on a plate on control box.) Ref. Section 2.
2. Be sure skillet has been or is cleaned before using.
3. Turn main gas cock to on.
4. Be certain skillet is lowered to the normal horizontal cooking position (or as much as 10° above) so burners will light.
5. Set the thermostat to the desired temperature. See Section 4—Test Kitchen Bulletin for thermostat settings.
6. Preheat to desired setting before grilling, pan frying, or any other type of cooking except boiling.

- Note:** For best results, allow unit to cycle ON/OFF once.
7. Cover should be up for most types of cooking, except simmering or boiling. The cover has a lip at the rear that will direct condensate into the skillet rather than onto the cabinet base.
 8. When food is cooked, it should be immediately removed from skillet to prevent overcooking.
 9. To lower skillet, merely turn tilt skillet handcrank counterclockwise. To raise skillet, turn handcrank clockwise.
- Note:** "LX" models are raised and lowered using switch on front of control box.
10. For cleaning instructions, see Section 6—Troubleshooting and Maintenance.

CAUTION: BE SURE TO READ

- Disconnect the power supply to skillet before cleaning or servicing. (Note: "LX" models should have the skillet raised to washing position before disconnecting power supply.)
- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- If skillet pan is difficult to raise, the lift gears may need to be lubricated. The gears are located on the right side under the control box. Apply a liberal amount of grease along the helical thread of the worm where it engages the worm gear. Use multi-purpose, NLGI #2 lithium-based, water-resistant grease.

- Keep this manual for future reference.
- Consult the factory, the factory representative, or a local service company to perform maintenance and repairs.
- In the event of a power failure, do not operate appliance.
- Periodically examine the flue outlet located behind the skillet cover for any obstructions.
- Appliances with casters are always to be restrained from movement. If removal of the restraint is necessary, always reconnect the restraint when the appliance is returned to its originally installed position.

SECTION 3 OPERATING INSTRUCTIONS

OPERATION OF UNIVERSE TILTING SKILLET WITH PILOTLESS IGNITION

**MODELS: 30-STGL-4, 30-STGM-4, 40-STGL-4, 40-STGM-4, Gas Pilotless Ignition
30-STGM-4LX, 30-STGL-4LX, 40-STGM-4LX, 40-STGL-4LX, Gas Pilotless Ignition with Power Tilt**

1. Check to see that the correct gas connection has been made to the unit, the electric 110/120-volt connection has been made, and the pilot has been lighted. (Instructions for lighting pilot are on a plate on control box.) Ref. Section 2.
2. Be sure skillet has been or is cleaned before using.
3. Be certain skillet is lowered to the normal horizontal cooking position (or as much as 10° above) so burners will light.
4. Set the thermostat to the desired temperature. See Section 4—Test Kitchen Bulletin for thermostat settings.
5. Preheat to desired setting before grilling, pan frying, or any other type of cooking except boiling.
6. Cover should be up for most types of cooking, except simmering or boiling. The cover has a lip at the rear that will direct condensate into the skillet rather than onto the cabinet base.
7. When food is cooked, it should be immediately removed from skillet to prevent overcooking.
8. To lower skillet, merely turn tilt skillet handcrank counterclockwise. To raise skillet, turn handcrank clockwise.

Note: "LX" models are raised and lowered using switch on front of control box.

9. For cleaning instructions, see Section 6—Troubleshooting and Maintenance.

Note: For best results, allow unit to cycle ON/OFF once.

CAUTION: BE SURE TO READ

- Disconnect the power supply to skillet before cleaning or servicing. (Note: "LX" models should have the skillet raised to washing position before disconnecting power supply.)
- Keep this appliance area free and clear of combustibles.
- Do not obstruct the flow of combustion and ventilation air.
- If skillet pan is difficult to raise, the lift gears may need to be lubricated. The gears are located on the right side under the control box. Apply a liberal amount of grease along the helical thread of the worm where it engages the worm gear. Use multi-purpose, NLGI #2 lithium-based, water-resistant grease.

- Keep this manual for future reference.
- Consult the factory, the factory representative, or a local service company to perform maintenance and repairs.
- In the event of a power failure, do not operate appliance.
- Periodically examine the flue outlet located behind the skillet cover for any obstructions.
- Appliances with casters are always to be restrained from movement. If removal of the restraint is necessary, always reconnect the restraint when the appliance is returned to its originally installed position.

SECTION 4 TEST KITCHEN BULLETIN

UNIVERSE TILTING SKILLET

**MODELS: 30-STGL, 30-STGL-LX, 40-STGL, 40-STGL-LX, Open-Leg Gas UniVerse Skillet
30-STGM, 30-STGM-LX, 40-STGM, 40-STGM-LX, Modular Gas UniVerse Skillet**

COOKING FACTS ON PARADE

1. The UniVerse Skillet is one of the most versatile pieces of equipment to be found in any restaurant or institutional kitchen.
2. This unit will stew, simmer, pan-fry, braise, grill, and sauté—and all with a very uniform heat pattern.

Note: DO NOT ATTEMPT TO DEEP FRY WITH YOUR SKILLET!

3. For best results, the Tilting Skillet should always be preheated and allowed to cycle once.
4. A great deal of heavy lifting and transferring of foods from one pan to another can be eliminated, and, therefore, pot washing will be reduced.
5. This type of equipment usually reduces the total cooking time by as much as 25% on combination dishes.
6. Sauces usually lose less moisture, as the cover reduces evaporation.
7. Large batches of gourmet items can be prepared with less work and with more uniform results.
8. Frozen vegetables can be cooked in the UniVerse Skillet in the serving pan, then removed and transferred directly to the serving line.

9. The following temperatures should be used:

Simmering:	Maximum of 200 °F
Saut éeing:	225 –275°F
Searing:	300 –350°F
Frying:	325 –375°F
Grilling:	350–425°

10. Temperatures of approximately 200°F should always be used for milk-based products, or scorching will take place. Lower temperatures (150–175°F) prevent thickening.
11. Some items should be started at a high temperature and then reduced. This permits sealing for about 20% of the time and cooking for the remaining 80%.
12. The cover has a lip at the back edge that directs the condensate on the cover back into the skillet.
13. The unit tilts easily to 90°, and receiving pan is always approximately 2 inches from the pouring lip of the skillet.
14. The stainless steel UniVerse Skillet is rapidly cleaned with a mild detergent. Water, waste, and scraps are easily removed into the receiving pan for disposal. (It is always recommended that this type of unit be presoaked if possible.)
15. Breakfast foods such as sausage, bacon, pancakes, fried eggs, scrambled eggs, and French toast are a few of the more common items that can be cooked in the UniVerse Skillet.
16. When cooking meat or poultry, all pieces should be of fairly uniform size and weight and should be turned at least once while simmering.
17. This unit can be converted to a proof box by placing a small amount of water in the pan to form steam and then placing the food in another pan. The thermostat should be set very low (100–150°F).
18. The unit can also be used as a holding cabinet by adding water and setting the thermostat at approximately 175°F.
19. When using water over and over for vegetable cookery, be sure to add water occasionally to keep level at about 3–4 inches. Thermostat should be set at 250°F.
20. Perforated 2 1/2"-deep pans are suggested for vegetables for the most satisfactory results. The pan can then be removed easily and transferred to the serving line.

SECTION 4 TEST KITCHEN BULLETIN

TABLE 4.1
COOKING PORTIONS AND TIMES

UNIVERSE SILLET
ALL MODULAR & TUBULAR LEG MODELS

The UniVerse Skillet is one of the most versatile pieces of equipment to be found in any restaurant or institutional kitchen. It enables the cook to stew, simmer, pan-fry, braise, grill, or sauté, and all with a very uniform heat pattern. The figures given below are suggested quantities and temperature settings and estimated numbers of orders per load and per hour. When two temperatures are given, the first is to start the product, the second to finish the product.

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	30 GALLON PER LOAD QTY.	30 GALLON PER LOAD YIELD	40 GALLON PER LOAD QTY.	40 GALLON PER LOAD YIELD
BREAKFAST FOODS							
Bacon	3 slices	350°	12	2#	10	3#	15
Eggs							
Boiled-Hard	1 egg	225°	5	50	50	75	75
Boiled-Soft	1 egg	225°	8	50	50	75	75
Fried	1 egg	400°	4	30	30	45	45
Poached	1 egg	225°	5	36	36	60	60
Scrambled	1 1/2 eggs	300° 200°	1	18 gallon	720	28 gallon	1100
French Toast	3 slices	450°	7	35 slices	12	50 slices	17
Regular Oatmeal	1/2 cup	250°	2	20#	500	40#	1000
Pancakes	2 each	400°	10	30 each	15	50 each	25
FISH							
Clams	1 pt.	400°	10	10 qts.	20	15 qts.	30
Fish Cakes	2 oz.	400°	5	70-3 oz.	35	110-3 oz.	55
Haddock Filet	4 oz.	400°	4	60-4 oz.	60	90-4 oz.	90
Halibut Steak	5 oz.	450°	3	60-4 oz.	60	90-4 oz.	90
Lobster	1-1#	350°	4	20-1#	20	30-1#	30
Swordfish	5 oz.	450°	3	50-5 oz.	50	75-5 oz.	75
SAUCES, GRAVIES & SOUPS							
Brown Gravy	1 oz.	350° 200°	2	18 gallons	2300	35 gallons	4500
Cream Sauces	2 oz.	250° 175°	1	18 gallons	1150	35 gallons	2250
Cream Soup	6 oz.	200°	1	18 gallons	375	35 gallons	725
French Onion Soup	6 oz.	225°	1	18 gallons	350	35 gallons	700
Meat Sauce	4 oz.	350° 200°	1	18 gallons	575	35 gallons	1100
MISCELLANEOUS							
Grilled Cheese	1 sand	400°	8	35 sand	35	50 sand	50
Macaroni & Cheese	8 oz.	200°	2	18 gallons	300	35 gallons	525
Rice	4 oz.	350° 225°	1	20# raw	320	40#	650
Spaghetti	4 oz.	350° 225°	2	8# raw	200	12#	300

CONTINUED 4

SECTION 4 TEST KITCHEN BULLETIN

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	30 Gal. PER LOAD QTY.	YEILD	40 Gal. PER LOAD QTY.	YEILD
MEAT, POULTRY							
Bacon	3 Slices	350 °	12	2#	10	3#	15
Beef							
American Chop Suey	6 oz.	400 °	225 °	2	18 Gal.	350	35 Gal. 700
Beef Stew	8 oz.	300 °	--	18 Gal.	280	35 Gal.	560
Corn Beef Hash	5 oz.	400 °	5	16#	50	25#	75
Cheeseburger	3 oz.	300 °	12	7#	35	10#	50
Hamburger	3 oz.	300 °	15	7#	35	10#	50
Meatballs	1 oz.	400 °	225 °	3	12 1/2#	65	18# 100
Pot Roast	2 oz.	350 °	200 °	--	120#	500	180# 750
Salisbury Steak	5 oz.	400 °	--	3	16#	50	24# 75
Sirloin Steak	6 oz.	400 °	5	15#	40	22 1/2#	60
Swiss Steak	4 oz.	300 °	200 °	1	25#	100	40# 160
Chicken							
Pan-Fried	2 1/4's	350 °	--	3	50 Pieces	25	80 Pieces 40
Whole	2 oz.	350 °	200 °	--	16-5#	200	24-5# 265
Frankfurters							
Grilled	2 oz.	300 °	--	8	22#	176	33# 264
Boiled	2 oz.	250 °	--	12	16#	128	25# 200
Ham Steak	3 oz.	400 °	--	8	10#	50	15# 75
Pork Chops	5 oz.	350 °	--	4	15#	50	25# 75
Sausage Links	3 Links	350 °	--	7	30#	120	45# 180
Turkey							
Off Carcass	2 oz.	400 °	200 °	--	3-26-30#	200	4-26-30# 275
On Carcass	2 oz.	400 °	200 °	--	4-16-20#	175	6-16-20# 265
VEGETABLES							
Canned	3 oz.	400 °	--	6	30#	125	45# 200
Fresh							
Beans	3 oz.	400 °	--	3	25#	125	50# 250
Beets	3 oz.	400 °	--	1	30#	125	60# 300
Broccoli	3 oz.	400 °	--	3	25#	125	40# 200
Cabbage	3 oz.	400 °	--	5	20#	80	30# 125
Carrots	3 oz.	400 °	--	2	35#	150	70# 300
Cauliflower	3 oz.	250 °	--	5	15#	75	25# 125
Corn	1 ear	400 °	--	8	50 ears	50	75 ears 75
Potatoes	3 oz.	400 °	--	2	40#	200	60# 300
Spinach	4 oz.	225 °	--	10	6#	25	9# 35
Turnips	4 oz.	400 °	--	2	20#	100	30# 150
Frozen							
Beans	3 oz.	400 °	--	6	15#	60	22 1/2# 90
Lima Beans	3 oz.	250 °	--	4	15#	60	22 1/2# 90
Broccoli	3 oz.	400 °	--	8	12#	50	18# 75
Sliced Carrots	3 oz.	250 °	--	6	15#	60	22 1/2# 90
Baby Carrots	3 oz.	250 °	--	3	15#	50	22 1/2# 90
Corn	3 oz.	250 °	--	18	15#	50	22 1/2# 90
Baby Onions	3 oz.	250 °	--	7	15#	50	22 1/2# 90
Peas	3 oz.	400 °	--	10	15#	75	22 1/2# 110
Spinach	3 oz.	400 °	--	3	15#	75	22 1/2# 110

CONTINUED 4

SECTION 4 TEST KITCHEN BULLETIN

ITEM	PORTION SIZE	THERMOSTAT SETTING	BATCHES PER HOUR	30 Gal. PER LOAD QTY.	YEILD	40 Gal. PER LOAD QTY.	YEILD
DESSERT ITEMS							
Butterscotch Sauce	1 oz.	200 °	1	18 Gal.	2300	35 Gal.	4500
Cherry Cobbler	3 oz.	200 °	1	19 Gal.	750	36 Gal.	1500
Chocolate Sauce	1 oz.	200 °	1	20 Gal.	2300	37 Gal.	4500
Cornstarch Pudding	4 oz.	200 °	1	21 Gal.	575	38 Gal.	1100
Fruit Gelatin	3 oz.	250 °	2	22 Gal.	750	39 Gal.	1500

**TABLE 4.1
COOKING PORTIONS AND TIMES**

1. The UniVerse Skillet is one of the most versatile pieces of equipment to be found in any restaurant or institutional kitchen. sealing for about 20% of the time and cooking for the remaining 80%.
2. This unit will stew, simmer, pan-fry, braise, grill, and sauté—and all with a very uniform heat pattern. Note: Do not attempt to deep fry with your skillet!
3. For best results, the Tilting Skillet should always be preheated and allowed to cycle once.
4. A great deal of heavy lifting and transferring of foods from one pan to another can be eliminated, and, therefore, pot washing will be reduced.
5. This type of equipment usually reduces the total cooking time by as much as 25% on combination dishes.
6. Sauces usually lose less moisture, as the cover reduces evaporation.
7. Large batches of gourmet items can be prepared with less work and with more uniform results.
8. Frozen vegetables can be cooked in the UniVerse Skillet in the serving pan, then removed and transferred directly to the serving line.
9. The following temperatures should be used:
 Simmering: maximum of 200°F
 Sautéing: 225–275°F
 Searing: 300–350°F
 Frying: 325–375°F
 Grilling: 350–425°F
10. Temperatures of approximately 200°F should always be used for milk-based products, or scorching will take place. Lower temperatures (150–175°F) prevent thickening.
11. Some items should be started at a high temperature and then reduced. This permits
12. The cover has a lip at the back edge that directs the condensate on the cover back into the skillet.
13. The unit tilts easily to 90°, and receiving pan is always approximately 2 inches from the pouring lip of the skillet.
14. The stainless steel UniVerse Skillet is rapidly cleaned with a mild detergent. Water, waste, and scraps are easily removed into the receiving pan for disposal. (It is always recommended that this type of unit be presoaked if possible.)
15. Breakfast foods such as sausage, bacon, pancakes, fried eggs, scrambled eggs, and French toast are a few of the more common items that can be cooked in the UniVerse Skillet.
16. When cooking meat or poultry, all pieces should be of fairly uniform size and weight and should be turned at least once while simmering.
17. This unit can be converted to a proof box by placing a small amount of water in the pan to form steam and then placing the food in another pan. The thermostat should be set very low (100–150°F).
18. The unit can also be used as a holding cabinet by adding water and setting the thermostat at approximately 175°F.
19. When using water over and over for vegetable cookery, be sure to add water occasionally to keep level at about 3–4 inches. Thermostat should be set at 250°F.
20. Perforated 2 1/2"-deep pans are suggested for vegetables for the most satisfactory results. The pan can then be removed easily and transferred to the serving line.

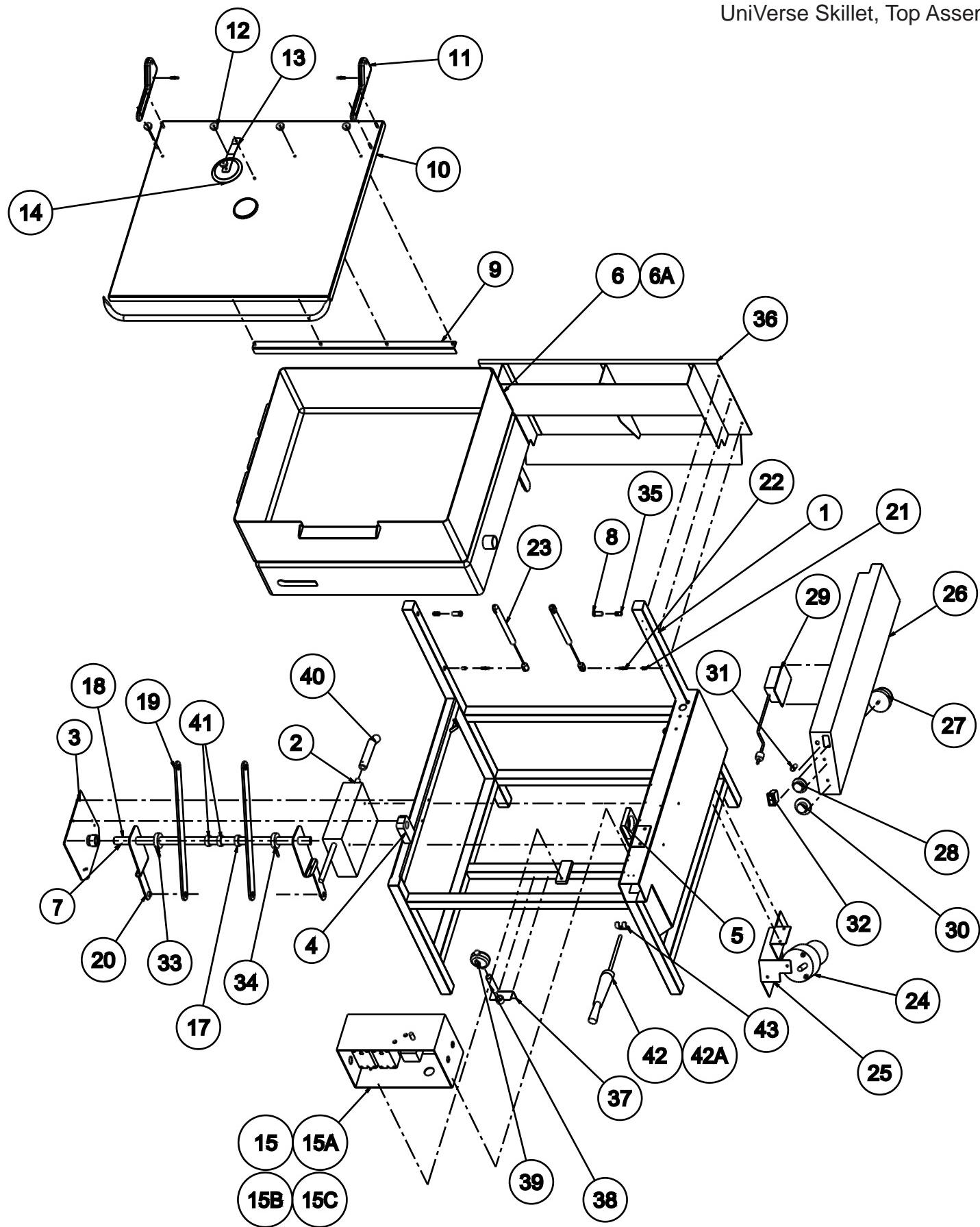
SECTION 5 ILLUSTRATED PARTS LIST

UniVerse Skillet, Top Assembly

ITEM	30 GAL.	40 GAL.	DESCRIPTION	30 GAL.	40 GAL.
1	98-1296	98-1295	FRAME WELD ASSY.	1	1
2	98-1010	98-1010	GEAR BOX	1	1
3	98-1031	98-1031	ASSY, BEARING SUPPORT	1	1
4	98-1339	98-1339	BEARING MOUNT LEFT	1	1
5	98-1300	98-1300	BEARING MOUNT RIGHT	1	1
6	98-1327	98-1008	PAN ASSY., STANDING PILOT	1	1
6A	98-1245	98-1358	PAN ASSY., CARBORUNDUM	1	1
7	REF	REF	SHAFT	1	1
8	08-7809	08-7809	SHOULDER SCREW	2	2
9	98-1311	98-1093	STIFFENER, PAN COVER	1	1
10	98-1310	98-1090	COVER	1	1
11	98-1012	98-1012	HINGE	2	2
12	91-9325	91-9325	KNOB	4	4
13	91-9262	91-9262	ARM, VENT COVER	1	1
14	91-9261	91-9261	VENT COVER	1	1
15	98-1346	98-1346	NEMA BOX ASSY, STANDING PILOT MANUAL LIFT	1	1
15A	98-1345	98-1345	NEMA BOX ASSY, STANDING PILOT POWER LIFT	1	1
15B	98-1343	98-1343	NEMA BOX ASSY, CARBORUNDUM MANUAL LIFT	1	1
15C	98-1342	98-1342	NEMA BOX ASSY, CARBORUNDUM POWER LIFT	1	1
17	98-1068	98-1068	WELD ASSY, CAM LIFT	1	1
18	98-1538	98-1539	WELD ASSY, TILT MECHANISM, (NEWER DESIGN)	1	1
19	98-1258	98-1258	ARM, EXTENSION	2	2
20	REF	REF	ARM, LIFT	2	2
21	08-7810	08-7810	RIVNUT, 5/16 THD	2	2
22	REF	REF	SHOCK MOUNT, COMES WITH SHOCKS, NO NUMBER	4	4
23	08-7806	08-7827	GAS SHOCK	2	2
24	98-0985	98-0985	MOTOR, POWER LIFT OPTION	1	1
25	98-1348	98-1348	WELD ASSY, MOTOR MOUNT. BRK., POWER LIFT OPTIONAL	1	1
26	98-1281	98-1281	CONTROL BOX	1	1
27	10-5520	10-5520	60 MIN. TIMER	1	1
28	09-5267	09-5267	TIMER KNOB	1	1
29	08-7913	08-7913	THERMOSTAT	1	1
30	REF	REF	THERMOSTAT KNOB, COMES WITH THERMOSTAT, NO NUMBER	1	1
31	10-5052	10-5052	LIGHT	1	1
32	98-1308	08-6320	POWER SWITCH PLUG, MANUAL LIFT	1	1
32A	08-6320	08-6320	POWER SWITCH, POWER LIFT OPTION	1	1
33	91-9144	91-9144	LEFT SPRING	1	1
34	91-9145	91-9145	RIGHT SPRING	1	1
35	08-7813	08-7813	INSERT 3/8	2	2
36	98-1234	98-1264	FLUE BOX ASSY.	1	1
37	98-0649	98-0649	BRACKET ASSY, GAS VALVE	1	1
38	10-2836	10-2836	3/4" X 3" B.I. NIPPLE	1	1
39	10-8459	10-8459	VALVE, MANUAL	1	1
40	98-1216	98-1216	UNIVERSAL, EXTENDED	1	1
41	98-1326	98-1326	WELD ASSY, CAM, UP AND DOWN, POWER LIFT OPTION	2	2
42	98-1333	98-1333	CRANK HANDLE, MANUAL LIFT	1	1
42A	98-1267	98-1267	CRANK HANDLE, POWER LIFT	1	1
43	98-1270	98-1270	HANDLE BRACKET, MANUAL LIFT	1	1

SECTION 5 ILLUSTRATED PARTS LIST

UniVerse Skillet, Top Assembly



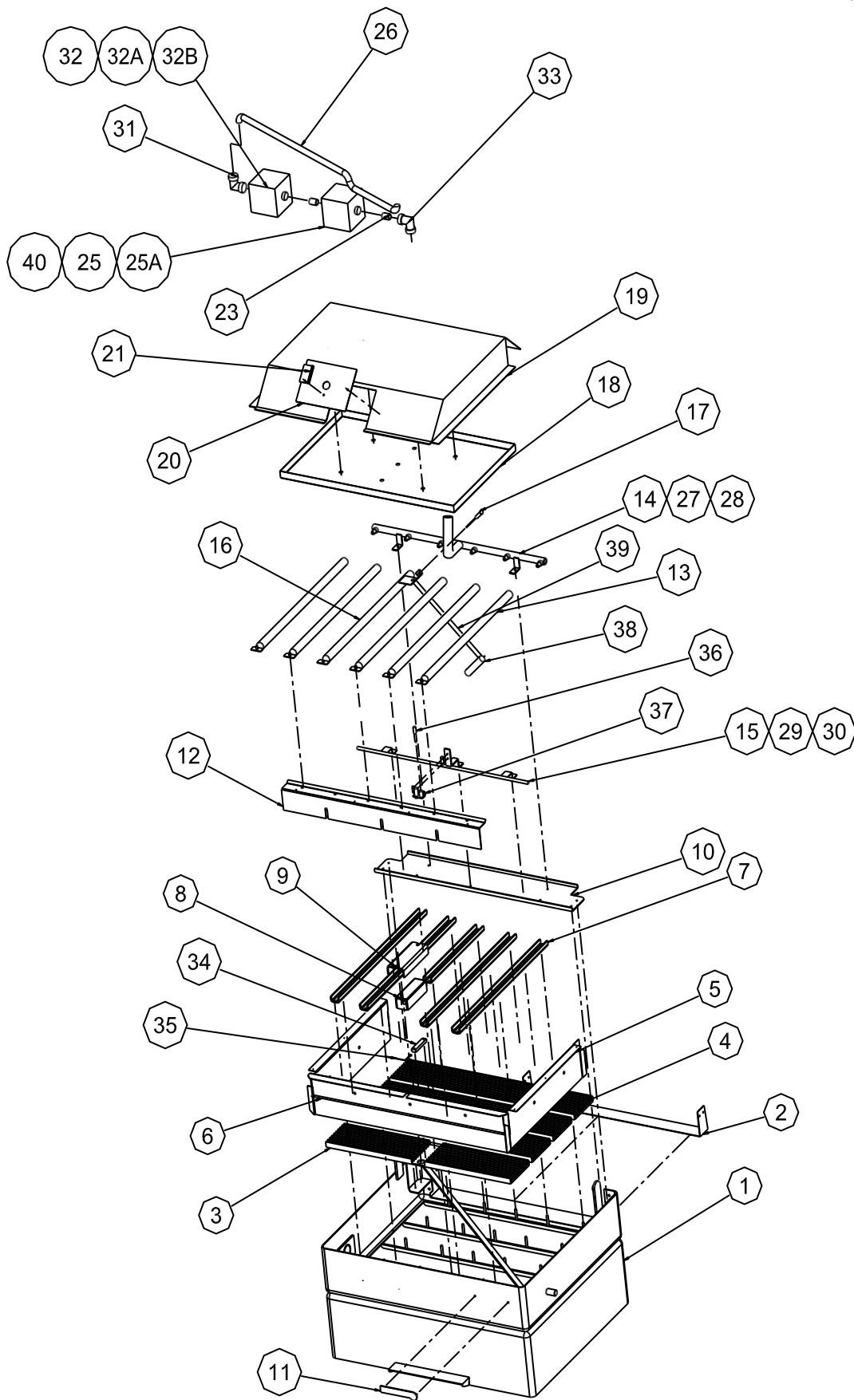
SECTION 5 ILLUSTRATED PARTS LIST

UniVerse Skillet, Pan Assembly

ITEM	30 GAL.	40 GAL.	DESCRIPTION	30 GAL.	40 GAL.
1	98-1245	98-1225	PAN WELD ASSY. (30 GAL.)	1	1
2	98-1249	98-1299	COVER, FLUE BOX PAN	1	1
3	98-1364	98-1380	ALUMINUM EXTRUSION, MACHINED	1	1
4	98-1318	98-1046	ALUMINUM EXTRUSION	3	3
5	98-1072	98-1072	INSULATION COVER, SIDE	2	2
6	98-1086	98-1071	INSULATION COVER, FRONT (30 GAL.)	1	1
7	98-1347	98-1347	U-CHANNEL, LONG	5	8
8	98-1242	98-1242	THERMAL COUPLING	1	1
9	98-1243	98-1243	COUPLING, THERMAL SHEILDING	1	1
10	98-1314	98-1050	DEFLECTOR SHIELD (REAR)	1	1
11	08-5894	08-5894	MARKET FORGE NAME PLATE	1	1
12	98-1223	98-1223	U CHANELL, SHORT	1	1
13	98-1009	98-1009	BURNER, ASSY.(CARBORUNDUM UNITS)	5	7
13A	98-1009	98-1009	BURNER, ASSY.(STANDING PILOTS UNITS)	6	8
14	98-1076	98-1061	WELD ASSY. BURNER MANIFOLD	1	1
15	98-1032	98-1403	CROSS OVER LIGHTING TUBE	1	1
16	98-1206	98-1206	BURNER, CARBORUNDUM IGNITION	1	1
17	08-6452	08-6452	FLAME SENSOR, CARBORUNDUM UNITS	1	1
18	98-1074	98-1073	PANEL, BURNER COVER, INSULATION RETAINER	1	1
19	98-1075	98-1055	BURNER SHIELD COVER	1	1
20	98-1410	98-1410	ACCESS PANEL, BURNER COVER	1	1
21	98-1411	98-1411	ACCESS PANEL COVER	1	1
22					
23	10-2864	10-2864	PIPE 1/2" X 2" LONG CARBORUNDUM UNITS	3	3
23A	10-2864	10-2864	PIPE 1/2" X 2" LONG STANDING PILOT UNITS	2	2
24					
25	09-1150	09-1150	REGULATOR, NATURAL GAS, CARBORUNDUM	1	1
25	09-1151	09-1151	REGULATOR, PROPANE, CARBORUNDUM	1	1
26	98-1063	98-1063	FLEX HOSE	1	1
27	10-0957	10-0957	ORIFICE, NATURAL GAS	6	8
28	10-2921	10-2921	ORIFICE, PROPANE	6	8
29	10-6481	10-6481	ORIFICE, CARY OVER TUBE, NATURAL GAS	1	1
30	10-6482	10-6482	ORIFICE, CARY OVER TUBE, PROPANE	1	1
31	REF	REF	ELBOW, COMES WITH FLEX HOSE, NO NUMBER	1	1
32	98-1481	98-1481	GAS VALVE, NATURAL GAS	1	1
32A	98-1481	98-1481	GAS VALVE, PROPANE, (NEED ITEM # 40)	1	1
32B	08-7108	08-7108	GAS VALVE, CARBORUNDUM UNITS	1	1
33	10-2811	10-2811	1/2" STREET ELBOW	1	1
34	08-6383	08-6383	HI LIMIT THERMOSTAT	1	1
35	08-6305	08-6305	TEMPERATURE SENSOR	1	1
36	10-4758	10-4758	FLAME SENSOR, STANDING PILOT	1	1
37	10-5812	10-5812	STANDING PILOT, NATURAL GAS	1	1
37A	98-1199	98-1199	STANDING PILOT PROPANE	1	1
38	10-8259	10-8259	IGNITOR, CARBORUNDUM UNITS	1	1
39	08-7849	08-7849	1/4" O.D.S.S FLEX TUBING, 18" LG	2	2
40	08-7902	08-7902	KIT, CONVERSION, NATURAL TO PROPANE	1	1

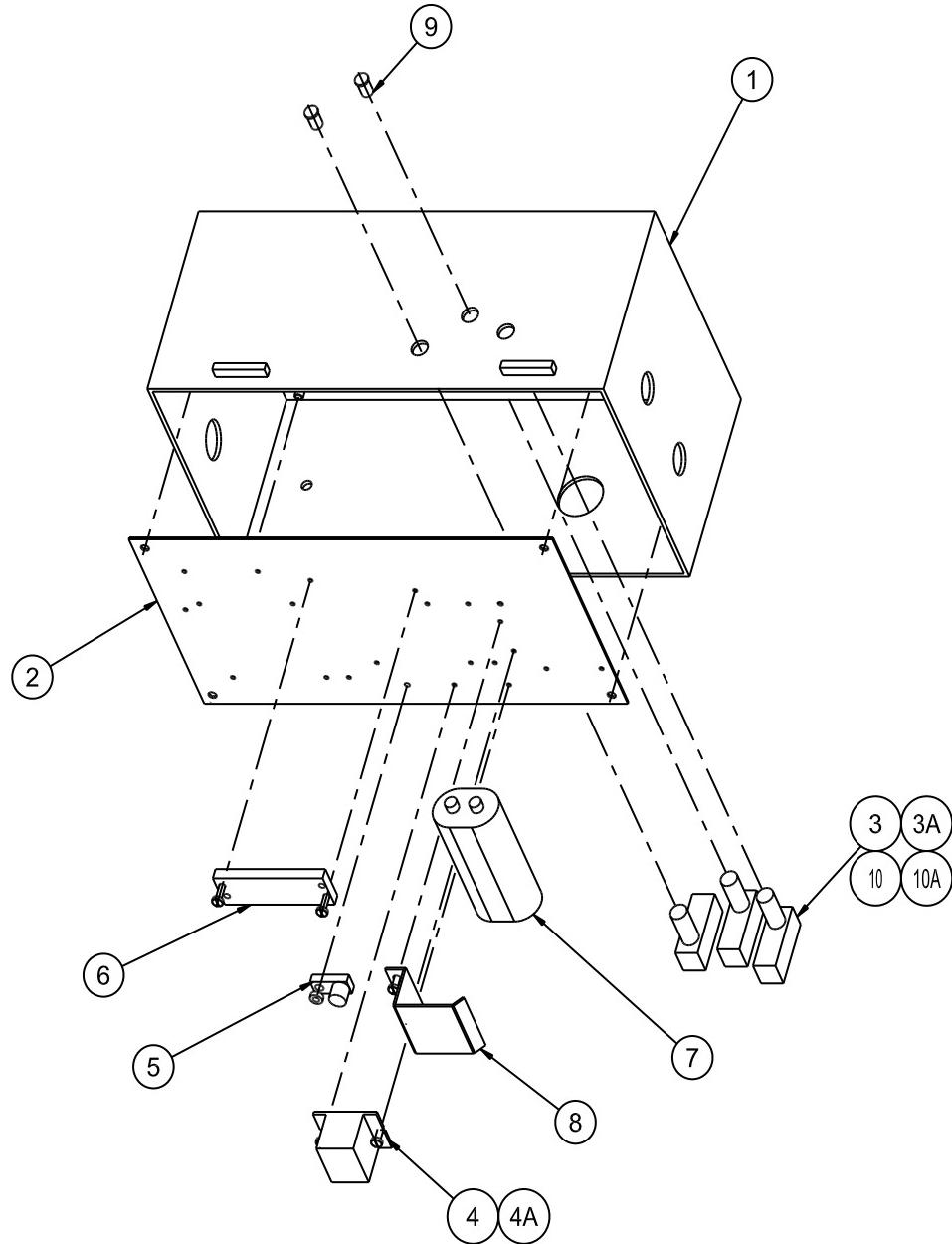
SECTION 5 ILLUSTRATED PARTS LIST

UniVerse Skillet, Pan Assembly



SECTION 5 ILLUSTRATED PARTS LIST

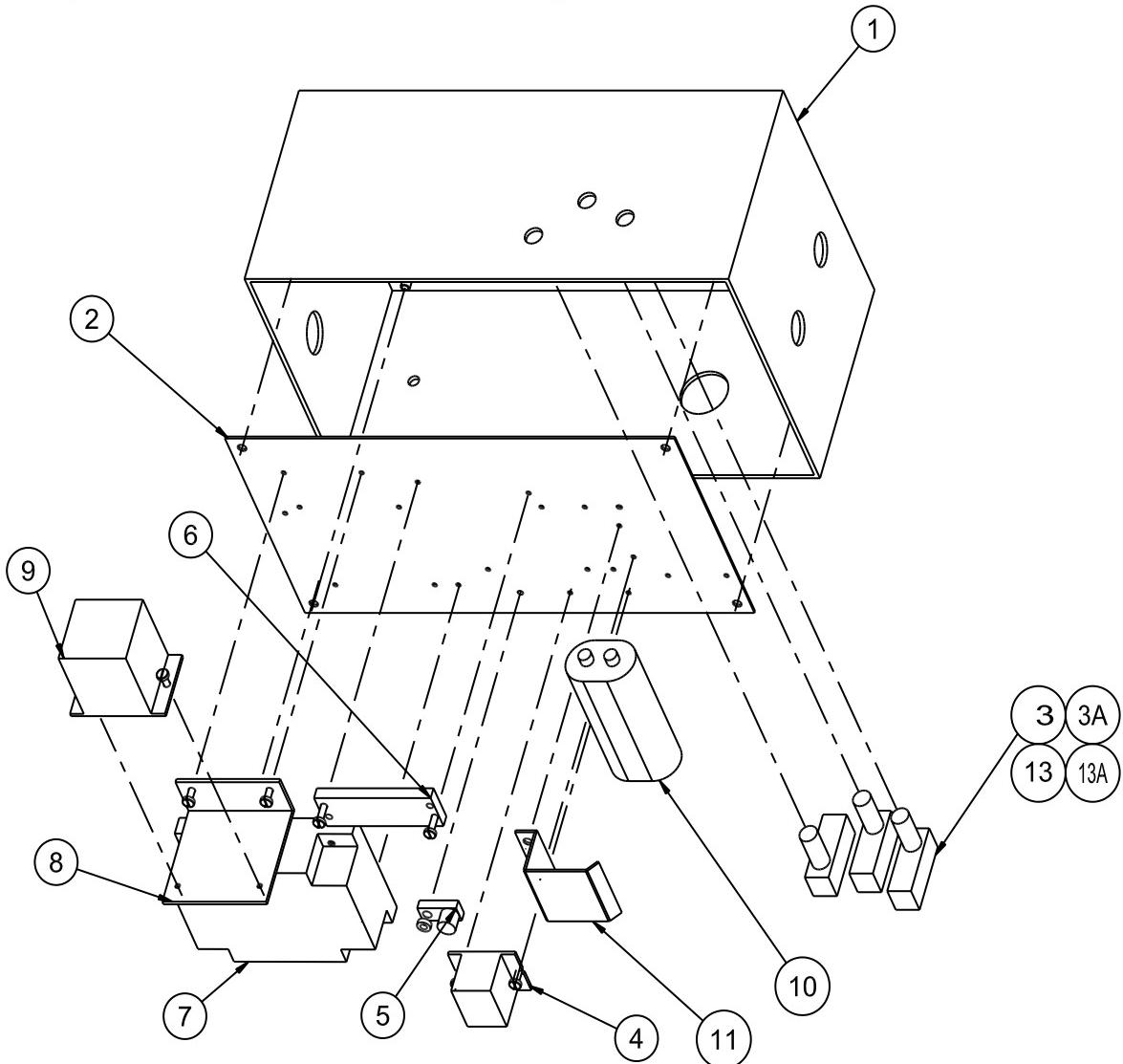
UniVerse Skillet, Standing Pilot Nema Box Assembly



ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1336	NEMA BOX, LARGE	1
2	98-1265	MOUNTING PLATE, NEMA BOX	1
3	08-7901	MICROSWITCH, POWER TILT UNITS	3
3A	08-7901	MICROSWITCH, MANUAL TILT UNITS	1
4	10-5503	SECTION, TERMINAL BLOCK, BLACK	2*
4A	10-5070	END PIECE, TERMINAL BLOCK, BLACK	1
5	10-5220	ELECTRICAL GROUND	1
6	10-6005	TERMINAL STRIP	1
7	REF	CAPACITOR, COMES WITH MOTOR	1
8	91-9178	CAPACITOR BRACKET, POWER LIFT OPTION	1
9	08-7826	MICROSWITCH HOLE PLUG, MANUAL TILT UNITS	2
10	08-7846	BOOT, RUBBER, MICROSWITCH	1
10A	08-7846	BOOT, RUBBER, MICROSWITCH	2*

SECTION 5 ILLUSTRATED PARTS LIST

UniVerse Skillet, Carborundum Nema Box Assembly



ITEM	PART NO.	DESCRIPTION	QTY.
1	98-1336	NEMA BOX, LARGE	1
2	98-1265	MOUNTING PLATE, NEMA BOX	1
3	08-7901	MICROSWITCH, POWER TILT UNITS	3
3A	08-7901	MICROSWITCH, MANUAL TILT UNITS	1
4	10-5503	SECTION, TERMINAL BLOCK, BLACK	2*
4A	10-5070	END PIECE, TERMINAL BLOCK, BLACK	1
5	10-5220	ELECTRICAL GROUND	1
6	10-6005	TERMINAL STRIP	1
7	08-7110	IGNITION MODULE	1
8	98-1344	BRACKET MOUNTING, TRANSFORMER	1
9	08-6450	TRANSFORMER 24V	1
10	REF	CAPACITOR, COMES WITH MOTOR	1
11	91-9178	CAPACITOR BRACKET, POWER LIFT OPTION	1
12	08-7826	MICROSWITCH HOLE PLUG, MANUAL TILT UNITS	2
13	08-7846	BOOT, RUBBER, MICROSWITCH	1
13A	08-7846	BOOT, RUBBER, MICROSWITCH	2*

SECTION 6 TROUBLESHOOTING & MAINTENANCE

PROBLEM	PROBABLE CAUSE	REMEDY	PART NUMBER
1. Uneven Heating.	a. Temperature control out of calibration or defective.	a. Calibrate or replace.	a. 08-6365
2. Signal Light Out.	a. Burnt out bulb. b. Broken temperature control. c. Loose electrical connection.	a. Replace. b. Replace. c. Repair.	a. 10-5052 b. 08-6365
3. Unit fails to heat.	a. Circuit breaker is off. b. Malfunction of interlock switch. c. Broken ignitor module. d. Broken ignitor. e. Broken flame sensor.	a. Reset circuit breaker. b. Adjust or replace. c. Replace. d. Replace. e. Replace.	b. 09-6465 c. 08-7110 d. 10-8259 e. 08-6452 10-4758
4. No 110 Volts output.	a. Defective temperature control. b. Broken temperature sensor.	a. Replace. b. Replace.	a. 08-6365 b. 08-6305
5. No gas to unit.	a. Defective gas valve.	a. Replace.	a. 10-7686 10-7683 08-7108 09-1150 09-1151

CALIBRATION OF TEMPERATURE CONTROL

1. Ensure that pan is empty and clean before calibrating.
2. Place a surface thermometer on left or right rear sides, 3" from sides of griddle surface.

NOTE: Check that magnets on thermometer extend through holes in circular base plate and are in complete contact with griddle surface.

3. Set temperature control knob at 375°F (191°C).
4. Allow skillet to preheat and stabilize 2–3 cyc
5. Record thermometer reading. If a temperature of 370°–380°F (188°–193°C) is recorded, procedure is complete. If not, go on to step 6.
6. Remove control box cover by removing screw in rear and right side of cover.
7. Locate temperature control circuit board (see Figure 6.1) and calibrate as follows:
 - a. If temperature goes above 375 °F (191°C), turn setpot labeled HI counterclockwise to decrease temperature.
 - b. If temperature goes below 375 °F (191°C), turn setpot labeled HI clockwise to increase temperature.

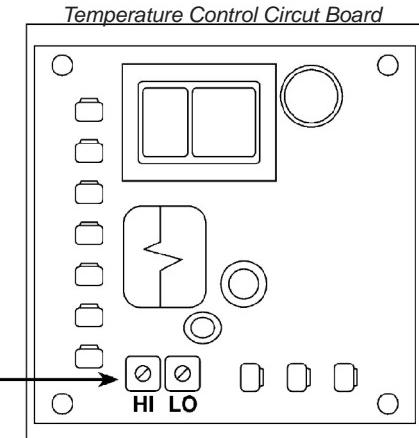


Fig. 6-1

NOTE: Turn the HI setpot only. Be careful when turning setpot—just a slight turn (approximately 22°) will change temperature by 25°F.

8. Allow skillet to cycle three (3) times. This cycling allows temperature control to stabilize.
9. Record thermometer reading when pilot light goes out. If a temperature of 370°–380°F (188°–193°C) is recorded, calibration procedure is complete. If not, repeat steps 7 and 8 until appropriate temperature is recorded.
10. Replace control box cover by pushing down and replacing screw in rear and right side of cover.

SECTION 6 TROUBLESHOOTING & MAINTENANCE

REPLACEMENT OF TEMPERATURE CONTROL

1. Place circuit breaker in off position.
2. Remove skirted dial knob by pulling it off the control box cover.
3. Remove control box cover by removing screw in rear and right side of cover.
4. Disconnect all wire leads from temperature control.

NOTE: Leads should be marked appropriately to facilitate re-installation.

5. Remove temperature control by removing two (2) pan head nuts from side of control box.
6. Install new temperature control and reverse steps 1–5.

ADJUSTMENT OF INTERLOCK SWITCH

1. Tilt skillet pan all the way in the downright position.

NOTE: If adjusting the interlock switches for the tilt mechanism in a power tilt unit, the pan will have to be all the way in the upright position to adjust one of the switches.

2. Place circuit breaker in off position.
3. Open the nema box by loosening the two screws at the top of the nema box.
4. Loosen the bottom nut of the switch until it contacts with the cam and depresses the plunger on the switch.
6. Close and fasten the nema box by tightening the 2 screws at the top of the box.
7. Place circuit breaker in on position. 5. Tighten the top nut on the switch to keep the switch in the desired location.

CLEANING

1. The skillet should be cleaned daily.
2. Wash the skillet with a mild detergent and hot water. If food is stuck to the surface of the skillet pan, soak it and use a little heat to loosen the food. Then, wash with clear water and dry.
3. Be sure to wash under the skillet cover and rinse with clear water.
4. Check the skillet pouring lip corners to be sure they are clean. Also, wash around the exterior of the skillet. Rinse with clear water and air dry.